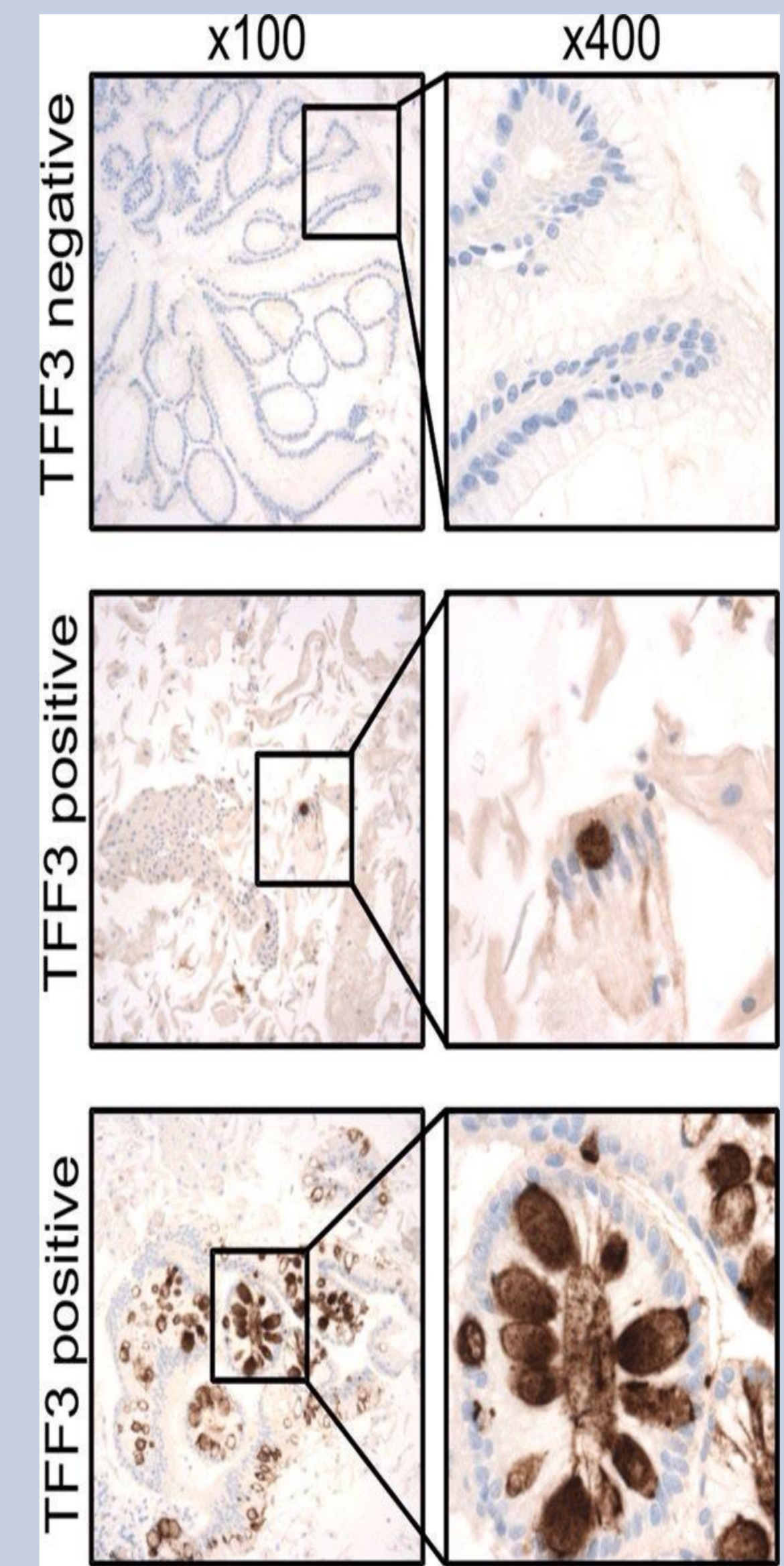
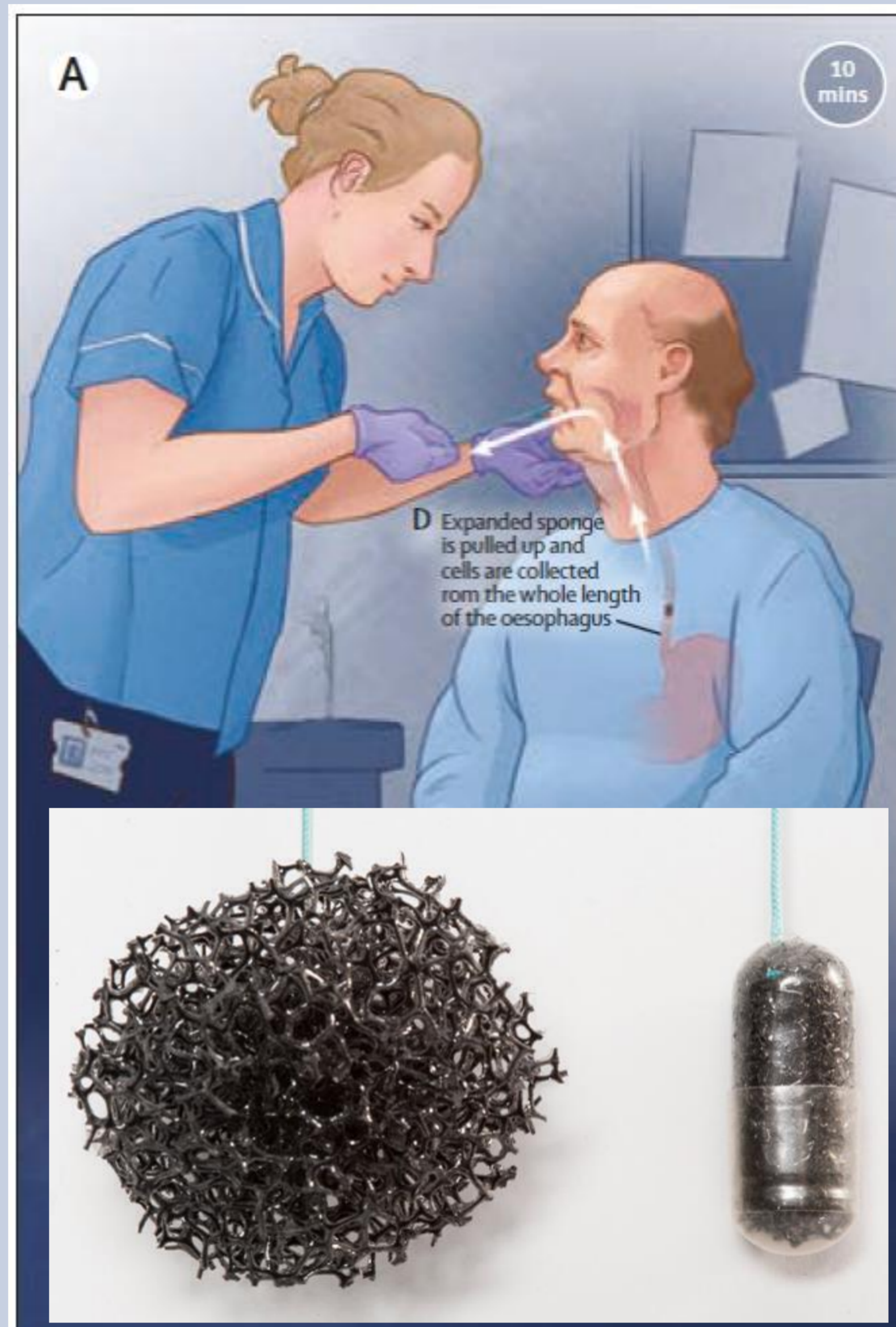


# Patient and public involvement in evaluating a novel screening test for the early diagnosis of oesophageal cancer in primary care.

Charles van Heyningen, retired chemical pathologist and patient representative, Cambridge, UK

**Images :**

- Some of the PPI volunteers.
- A focus group with PPI members and researchers
- Cytosponge sample collection
- Immunohistochemistry for TFF3



**Introduction**

Patient and Public Involvement (PPI) is an important part of designing a research study. It helps improve the effectiveness and acceptability of a study and is required for NIHR funded research. This poster describes the use of PPI in evaluating a laboratory screening test.

**Aims** Images are

The Barrett's oesophagus PPI Trial 2 (BEST2) Trial assesses whether offering the Cytosponge-trefoil factor 3 (TFF3) test in primary care finds more patients with oesophageal pre-cancer (Barrett's oesophagus) or cancer than current routine care. From cytosponge sample collection to slide preparation.

**Methods** Immunohistochemistry for TFF3

The study was a randomised controlled trial on >13,000 people in 109 primary care sites in England.

The Trial involved both a study of patients' experience of the test and the involvement of patient and public representatives in planning and monitoring of all stages of the trial.

The Cytosponge test involves swallowing a capsule containing a sponge used to collect cells from the oesophagus. The cells are examined after immunohistochemical staining for an oncogenic protein Trefoil Factor 3 found in pre-cancerous cells.

**Results**

The Trial benefitted from Patient and public involvement (PPI) at all stages: patient groups advocating for the clinical need for earlier diagnosis, research design and developing patient materials, ongoing trial management, large-scale patient attendance at GP surgeries and taking part in study-related communications.

The number of people diagnosed with either Barrett's oesophagus or oesophageal cancer was: 147 out of 6834 people (2%) in the Cytosponge test group and 16 out of 6388 people (0.2%) in the standard care group (p<0.0001).

For acceptability, 97% of participants scored it at least 5 out of 10. On side effects, only 4% had a sore throat for a short time afterwards which in some individuals needed painkillers or affected their eating habits.

**Conclusion**

The Cytosponge-TFF3 test led to significantly more people being diagnosed with Barrett's oesophagus compared with the standard care group.

Patient and public involvement contributed to the success of the trial and its publication.

See reference: The Lancet August 2020, Cytosponge-trefoil factor 3 versus usual care to identify Barrett's oesophagus in a primary care setting: a multicentre, pragmatic, randomised controlled trial.